Submission to the Queensland Competition Authority on the Draft Determination: Regulated Retail Electricity Prices 2012-13

April 2012

Contents

Executive Summary

Origin Energy (Origin) appreciates the opportunity to respond to the *Draft Determination: Regulated Retail Electricity Prices 2012-13* (Draft Decision) issued by the Queensland Competition Authority (QCA) and the accompanying expert report by ACIL Tasman (ACIL).

Origin has reviewed the Draft Decision and is encouraged that the QCA has, to a large degree, accepted Origin's proposals and set a framework that attempts to:

- reform retail electricity tariffs by moving them toward a cost reflective platform and removing many of the expensive cross subsidies that have existed for years;
- ensure pass through of relevant network tariffs, including the use of Ergon Energy's network tariffs to determine retail tariffs for large customers in its distribution area;
- provide for the pass through of the cost of carbon on wholesale energy prices;
- recognise retailers' cost of doing business through a benchmark which incorporates customer acquisition and retention costs;
- allow for an appropriate retail margin; and
- provide for competition in the retail market by including an allowance for headroom.

Regrettably, however, all the forward steps reflected in the Draft Decision have been grossly undermined because the methodology fails to recognise how the Queensland energy market operates in practice, and thus does not incorporate a realistic allowance for the cost of purchasing energy in Queensland and the associated issue of managing risk.

The QCA draft report fails to recognise that retailers will seek to enter into long term arrangements outside of the contract market to mitigate the financial exposure of being unable to fully contract positions. This is accomplished through generation and power purchasing agreements (PPAs) and, as set out below, provides a number of important ultimate benefits to electricity consumers. This represents a significant proportion of the actual cost of supplying electricity in Queensland.

Simply put, the Energy Cost allowance estimated is not sufficient to cover the actual cost of retailers supplying energy to Queensland customers as it fails to recognise the true cost of hedging the Queensland mass market load and, thus, fails to recognise this significant – and necessary – cost of a retailer's operations.

The energy cost is a key component of the Draft Decision and if formalised, will cause the tariff reform process to fail and in the short-term result in:

- retail tariffs not being fully cost reflective and, instead, being subsidised by current retailers;
- an inability for current retailers to invest in new products, innovation or marketing; and
- the potential failure of smaller retailers operating in the market, leading to retailer of last resort events.

Furthermore, the method selected for estimating the cost of energy is likely to result in significant adverse long-term impacts such as:

- consumers being exposed to large swings in price in the future - even as soon as next year;
- a disincentive to invest in new generation facilities in Queensland, threatening long term security of supply; and ultimately
- higher electricity prices over time.

Origin has also identified several irregularities with ACIL Tasman's (ACIL) methodology in its report *Estimated energy purchase costs for 2012/13 retail tariffs* which result in the cost outcomes being significantly underestimated. However, Origin submits that simply rectifying these errors will not alone provide for an adequate energy cost allowance. As a result, Origin encourages the QCA to:

- reconsider the inclusion of long run marginal cost (LRMC) in the method for estimating energy costs. This would better approximate the higher cost of retailers' contracted positions; or
- recognise that the market based approach used by ACIL is based on an incremental contract market that only covers a proportion of the actual electricity volumes supplied to Queensland's mass market customers. The modelling therefore requires an escalation of forward contract prices or inclusion of an additional risk premium to recognise the true cost of hedging the Queensland mass market load which is a significant – and necessary – cost of a retailer's operations.

1. Background

On the 26 June 2009, the Queensland Premier and Treasurer directed the Queensland Competition Authority (QCA) to review electricity pricing in Queensland. Origin participated in that review and was generally in agreement with the QCA's findings that:

- the benchmark retail cost index (BRCI) methodology had a number of flaws;
- the current retail electricity tariffs were unlikely to reflect the costs of supply;
- an alternative network (N) + retail (R) pricing approach would offer significant improvements to cost reflectivity compared to the existing BRCI methodology; and
- network and retail electricity tariffs should be aligned.

On 11 May 2011, the Minister for Finance and the Arts and Acting Treasurer and Minister for State Development and Trade made a Ministerial Direction requiring the QCA to investigate and report on:

- an alternative retail electricity pricing methodology for the determination of the cost components under an N + R approach; and
- an alternate set of retail electricity tariffs, based on an N+R approach, which could be applied from 1 July 2012.

On 22 September 2011, the QCA received a Delegation from the Minister for Energy and Water Utilities (Minister) further setting out the principles for determining regulated electricity prices to apply from 1 July 2012. The Delegation included a Terms of Reference (ToR) for the price determination. The ToR specifically states that the QCA should ensure its price determination has regard to:

- the actual costs of supplying electricity;
- the effect on competition in the Queensland retail electricity market; and
- the Queensland Government's Uniform Tariff Policy ensuring customers of the same class pay the same tariff for their electricity supply, regardless of geographic location.

The ToR further sets out that in the QCA's pricing determination, N (network costs) should be treated as a pass-through and R (energy and retail cost) should be determined by the QCA. The energy cost component of each regulated retail tariff should include the cost of purchasing energy, environmental and renewable energy costs, energy losses and any market fees. In terms of retail costs, the QCA must consider the retail costs that would reasonably be incurred by an efficient, representative retailer and include an appropriate retail margin giving consideration to any risks not compensated for elsewhere.

The QCA released a Draft Methodology Paper for comment in November 2011 and subsequently, the *Draft Determination: Regulated Retail Electricity Prices 2012-13* (Draft Decision) in March 2012.

In this submission, Origin is responding to the outcomes of the Draft Decision.

2. Energy Cost Component

Origin believes that the Draft Decision clearly fails to incorporate a realistic allowance for the cost of purchasing energy in Queensland.

First, the approach adopted by the QCA to exclude LRMC means that the methodology does not take into account the actual costs of supplying energy to Queensland customers, especially that of a large retailer servicing a significant mass market load.

Secondly, as the QCA is ignoring the market volumes that are contracted through physical assets or PPAs, its selected market based approach is only based on an incremental contract market. This may be representative for the cost to a new market entrant but does not provide a meaningful cost estimate for the industry as a whole for supplying electricity and does not sufficiently recognise the risks involved.

Thirdly, the modelling of the market based approach includes several errors which need to be rectified including:

- the hedging strategy is incorrectly formulated and mismatched to the load;
- the hedging strategy appears to actually reduce average cost;
- no changes have been made to the average NSLP for future deterioration due the removal of customers consuming greater than 100 MWh; and
- energy losses have not been applied to green schemes costs where appropriate.

However, it also includes irregularities that need further explanation and analysis as the energy cost and its individual elements are inexplicably well below industry expectations including being below estimates recently identified by ACIL itself in its report to the Australian Energy Market Commission (AEMC), *Wholesale energy cost forecast for serving residential users*.

2.1 Approach to Estimating Wholesale Energy Cost

The *Electricity Act 1994* states that:

S90(5) In making a price determination, the pricing entity—
(a) must have regard to all of the following—
(i) the actual costs of making, producing or supplying the goods or services;
(ii) the effect of the price determination on competition in the Queensland retail electricity market;
(iii) if QCA is the pricing entity—any matter the pricing entity is required by delegation to consider; and
(b) may have regard to any other matter the pricing entity considers relevant.

The ToR reiterates these requirements.

Origin does not believe the current methodology meets these requirements as the selected methodology and its implementation ignores a large proportion of retailers' actual costs of supplying electricity customers. Large retailers are required to hedge outside of the contract market in order to mitigate the potential risk of not being able to fully contract their positions and have accomplished this through generation and power purchasing agreements (PPAs). This cost represents a significant proportion of the actual cost of supplying electricity to Queensland consumers.

Origin believes the QCA can recognise these costs by including long run marginal cost (LRMC) in the method for estimating energy costs; to take account of the fact that the forward contract market only represents a proportion of retailer contacting.

2.1.1 Long Run Marginal Cost

The Draft Decision sets out the QCA's preference to pursue a market-based approach over a LRMC proposal as it takes the view that LRMC:

- is an estimate of generation costs as opposed to purchasing costs of a retailer;
- ignores the prevailing market conditions which may have an influence on the purchasing cost of some retailers; and
- ignores the existence of the NEM.

ACIL has also recommended that LRMC is unlikely to reflect actual wholesale energy purchase costs faced by retailers.

Origin believes that LRMC:

- is linked to the NEM as generation investment influences the prices in the spot and contract market, along with other factors;
- better approximates the actual costs of retailers' purchases through PPAs; and
- is therefore a cost estimate for a large part of a retailer's portfolio that has both theoretical merit as well as being readily modelled and identifiable.

If the QCA chooses to ignore LRMC, attempting to ascertain the necessary adjustments to be made to its market based approach in order to take into account the actual costs of supplying electricity is subjective and will increase the risk that this value will be understated.

Origin notes that IPART in its draft decision for 2012-13 electricity tariffs continues to use LRMC to set the floor price for measuring a retailer's costs and Origin strongly supports this approach. However, the QCA seems to only give weight to the ICRC's concerns regarding the use of LRMC. In contrast to this view are the conclusions of the AEMC in its Stage 2, Final Report[1] which recommended the removal of the regulated tariff (TFT) to promote competition in the ACT.

The AEMC report focussed on options to try to establish effective competition in the ACT and supported an approach more in line with the price setting approach in NSW and Queensland which it viewed as sound. The AEMC cited the methods used in both NSW and Queensland, in particular, the similarities in the calculation for energy cost allowance where both jurisdictions relied on LRMC to balance the wholesale risks of competitive retailers. Accordingly the AEMC recognised the energy cost allowance used in the NSW and Queensland jurisdictions meant a retailer received a rate of return commensurate with the risk of operating in the market and was more appropriate for a competitive market.

Importantly, using LRMC will also provide stability over time. Market conditions impact wholesale prices and varying price signals will result in significant price shocks both up and down. If the QCA continues to use its approach it will lead to tariffs being very volatile year to year. In a lumpy investment market such as the electricity market, the pool price will consistently under or over shoot LRMC based on the level of excess capacity. As capacity tightens over the next few years, using its preferred methodology will lead to large rises in notified electricity prices.

[1] Review of the effectiveness of competition in the electricity retail market in the ACT, published on 3 March 2011

This is inconsistent with the ToR which explicitly states that:

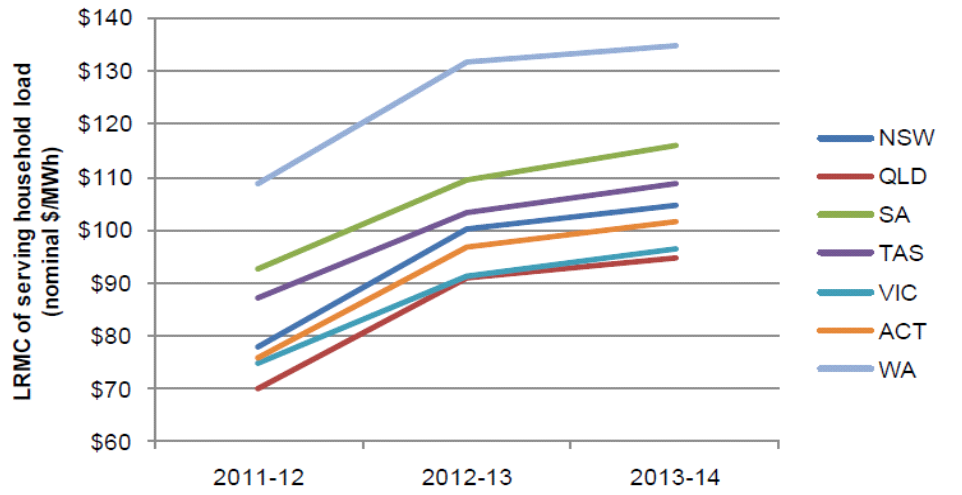
> *"the cost of energy component should seek balance the long term need for maintaining price stability with ensuring customers are not subject to unnecessary volatility in the short term".*

The following figures highlights recent forecasts of LRMC and market based energy costs of serving residential load as made by ACIL[2]. The significant increases in 2012-13 are predominantly due to the price of carbon but ACIL also forecast a 3 per cent increase in LRMC in 2013-14 for Queensland. In comparison, the ACIL market based approach forecast an 18 per cent increase the wholesale energy cost in Queensland in 2013-14.

Ignoring the influence of LRMC therefore exposes retail electricity prices to additional volatility including significant price impacts in 2013-14.

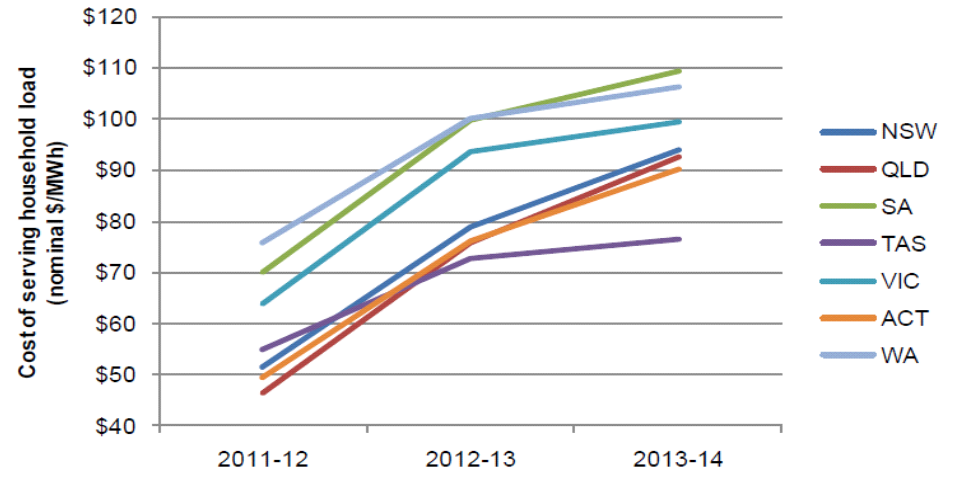
Figures 1 and 2: ACIL Forecasts for LRMC and Market wholesale energy cost

Figure ES 4 **LRMC of serving residential load – Carbon scenario**



Source: PowerMark LT modelling

Figure ES 1 **Market wholesale energy cost of serving residential load – Carbon scenario**



Source: PowerMark modelling

[2] ACIL Tasman, *Wholesale energy cost forecast for serving residential customers*, pxi

2.1.2 Market Based Approach

As highlighted above, the ACIL methodology is based on a contract market that is only a proportion of the actual demand and supply of electricity contracts. The QCA is therefore estimating a market energy cost using only a small representation of the market.

Origin and other large retailers, because of the potential risks involved, are required to contract long-term positions through physical generation or PPAs at higher prices which reduce contract market depth. The reduction in contract demand constrains forward contract prices at lower levels.

The counter argument by the QCA that the supply in the forward contract market would increase to match demand if all retailers pursued the hedging strategy is not valid as:

- increased generation capacity is not equivalent to increased forward contract supply as generators' risk profiles, supply reliability and spot price expectations will invariably mean that contracted supply is less than capacity as financial exposure to lower contracting levels is capped;
- retailers' financial exposure from a failure to appropriately hedge is markedly greater and can be considered open-ended; therefore
- retailers have a greater incentive to avoid the negative outcome of higher prices than the incentive of generators to avoid the negative outcome of lower prices.

The issue is therefore how does the QCA and ACIL capture the inherent under-estimation that will arise from its market based approach being based only a representation of the market and not complying with the ToR.

Origin previously proposed that the market based approach could be accommodated if an LRMC cost base was used for the hedge contract prices. However, if LRMC is ignored then there is the potential for the QCA to apply a suitable risk premium or appropriate escalation of contract market prices.

Origin notes that ACIL has previously applied in its report of October 2011 a standard swap premium of 5 per cent to both peak and base swaps which is inadequate in assessing the true costs.

2.2 ACIL's Modelling of Energy Purchase Cost

Origin is greatly concerned with ACIL's estimation of the energy purchase cost for 2012-13 as even cursory examination indicates that the outcome is well below market expectations. To highlight Origin's issue with the average energy purchase cost, Origin has compared ACIL's current modelling results with the results it published in its report of October 2011, *Wholesale energy cost forecast for serving residential users*.

It is immediately apparent that the 2012-13 energy purchase cost of $41.60 (excluding losses and carbon) produced for the QCA is significantly lower ($15/MWh) than that reported by ACIL in its previous report.

Origin accepts that different methodologies have been used for these reports but has examined the recent QCA result using the risk factors or uplifts that ACIL applied in its earlier report in order to calculate a total energy purchase cost from the time weighted price regional price. These are shown in Table 1.

Using the hedging costs and shape uplifts from ACIL's October report would convert the QCA energy purchase cost to a time weighted regional price of around $27 per MWh. This is totally unrealistic. Origin has also considered the scenario that ACIL has included no

premium for hedging costs. This in itself is implausible but the QCA energy purchase cost would then represent an underlying time weighted price of around $33 per MWh. This is still unrealistically low and raises doubts about the credibility of the ACIL modelling.

Table 1: ACIL Modelling of Queensland energy cost 2012-13, excluding carbon

		ACIL October 2011	ACIL March 2012 (+ premium)	ACIL March 2012 (no premium)
Energy Purchase Cost	($/MWh)	$56.62	$41.60	$41.60
Hedging Premium	($/MWh)	$7.84	$7.84	-
LWP Residential	($/MWh)	$48.78	$33.76	$41.60
Shape Uplift to residential	(%)	6.8%	6.8%	6.8%
LWP Region	($/MWh)	$45.68	$31.61	$38.95
Shape Uplift to LWP	(%)	16.83%	16.83%	16.83%
TWP Region	**($/MWh)**	**$39.10**	**$27.05**	**$33.34**

Origin notes that ACIL has also provided the results of its price distribution methodology for estimating energy purchase cost in its report to the QCA and that the results of this method closely align with ACIL's market based approach.

Origin and other industry participants were strongly opposed to the price distribution methodology as the suggested mean outcome of the proposed model did not resemble the approach of a prudent retailer nor did it bear any resemblance to the actual cost of supplying energy in Queensland[3]. An acceptable approach must establish an adequate energy purchase cost and this method could not be expected to achieve this. The fact that this method is producing similar results to the market based approach adds further weight that ACIL's modelling is producing erroneous outcomes that are not adequately quantifying the energy cost to retailers.

Origin has also identified some specific issues with ACIL's methodology that may be impacting the modelling outcomes which are discussed below.

2.2.1 Estimated contract prices

Origin agrees with ACIL's conclusion that prior to the passing of carbon legislation the carbon tax was only partially reflected in d-cypha Trade futures and that there was trading of OTC contracts excluding carbon. In addition retailers may have had policies that prevented trading carbon inclusive pricing prior to the carbon tax legislation being passed on the 8 November 2011.

If some form of market based approach is used, Origin strongly recommend a consistent approach for base and peak contracts of the Trade-weighted average of d-cypha Trade daily settlement prices and trades since 8 November 2011. Where there are no trades post 8 November 2011, the latest trade price should be used.

As the carbon tax doesn't impact cap contract prices, it is appropriate to use the Trade-weighted average of d-cypha Trade daily settlement prices since trading commenced.

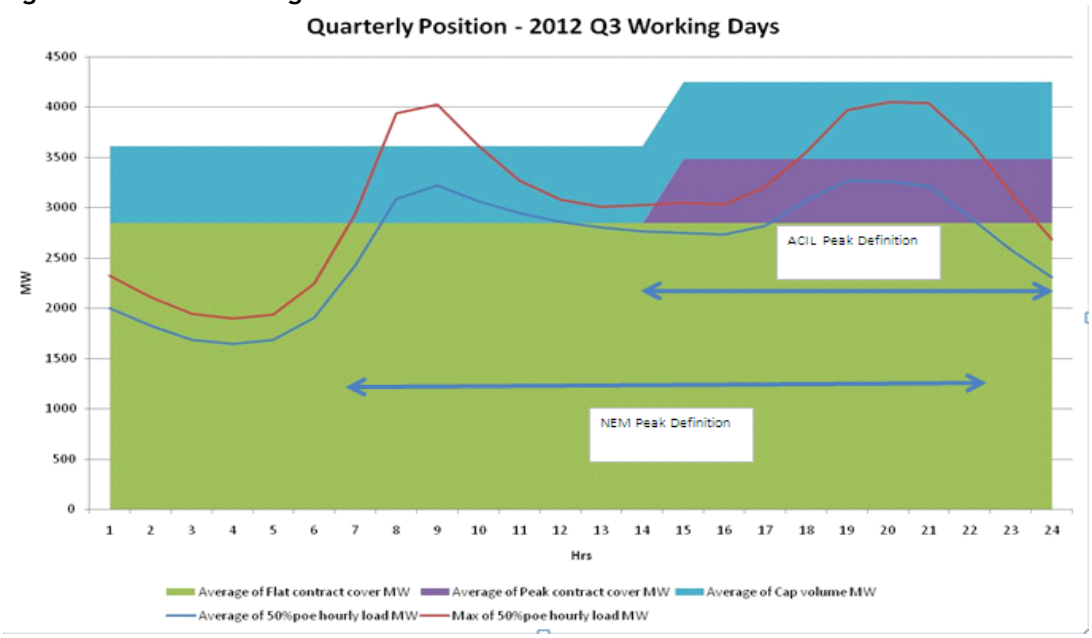
2.2.2 Hedging Approach

In Origin's opinion the hedging model used by ACIL is flawed and should not be used to determine the wholesale cost. Origin has examined some of the detailed data used and produced by ACIL in constructing the energy purchase cost. It is clearly evident when

[3] ACIL Tasman, *Calculation of energy costs for the 2011-12 BRCI Final Decision*, 30 May 2011,p10.

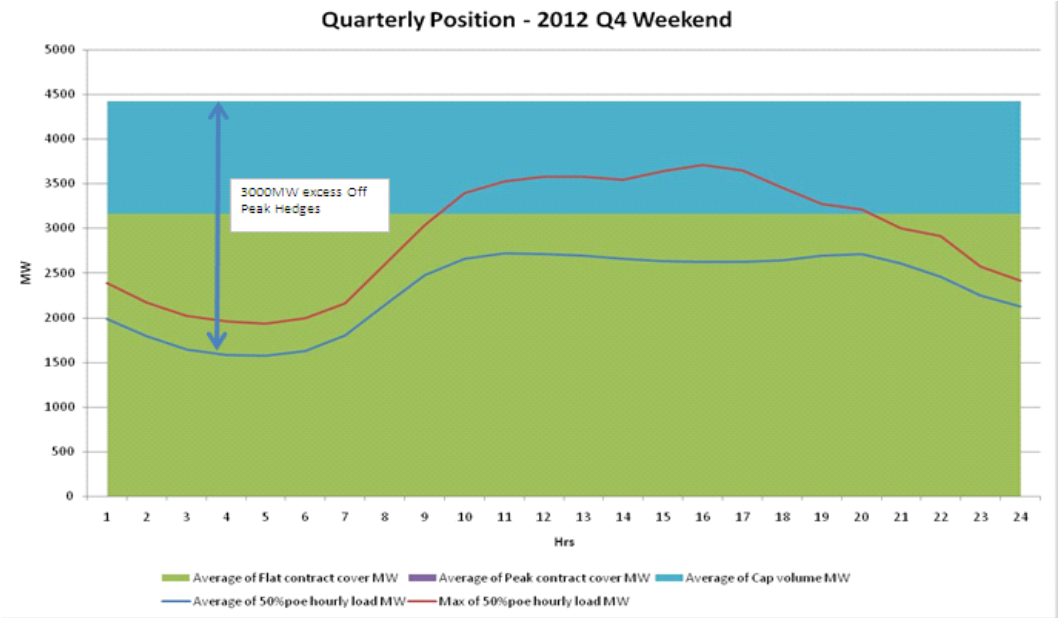
analysing the data that some basic modelling issues exist. First, the peak and off-peak times used in ACIL's modelled data have been incorrectly allocated and not properly aligned to the NEM peak and off-peak hours.

Figure 3: ACIL Modelling of Peak and Off-Peak contract cover



As a result, the representative retailer is under hedged or over hedged at inappropriate times of the day. For example, due to excessive contract length, Figure 4 highlights that the modelling can produce 3000MW of excess contract cover during off peak times.

Figure 4: ACIL Modelling of Peak and Off-Peak contract cover



This is not the responsible action or contracting policy of a prudent retailer. It can mean that the retailer perversely gets compensated for its long position in ACIL's modelling and this may be a factor driving the unrealistic modelling outcomes.

Generally, the methodology shows that the retailer is over hedged and not exposed to pool outcomes with the average energy purchase cost predominantly being influenced by the contract prices at which the load was hedged. This is a serious concern for Origin given the lack of market trading for the 2012-13 period due to carbon uncertainty (a fact recognised by QCA and ACIL in its Draft Methodology Report) and that it is appears the methodology predominantly rests on these few contract prices.

Origin has identified these issues despite having only access to the detailed datasets for a few days. This emphasises the inherent flaws with hypothetical purchase models, especially when no liquid market exists.

Even if the ACIL modelling was performed correctly, which it is clearly not, hedging to the median load shape ignores the natural risk aversion of retailers to want to hedge to the extreme load. The ACIL report alludes to this when it argues that ACIL Tasman is not able to estimate with any accuracy the extent to which the difference in risk aversion would shift the electricity contract price. No retailer hedges to the average.

If the QCA is to persist with averaging out the volatility in the market in its analysis it should provide an adequate risk margin to account for the likelihood that the actual load and price volatility in any one tariff year is not average. ACIL argues that retailers will naturally hedge above the mean price without quantifying it. Origin requests the QCA quantify how much retailers are willing to pay above the mean price to minimise risk.

2.2.3 Risk costs

ACIL determines the cost of energy based on median cost of the hedging strategy under 410 pool price simulations. Origin has examined the average energy cost using ACIL's reported average data as shown in Table 2.

Table 2: Average Cost based on ACIL modelling

		Flat contract cover	Peak contract cover	Cap volumes	50%poe hourly load
Q3	MW	6,277,973	421,941	1,699,752	5,524,675
Q4	MW	6,973,810	365,925	2,794,424	5,852,350
Q1	MW	7,841,031	487,571	2,718,790	6,422,197
Q2	MW	6,219,424	302,332	1,691,242	5,346,205
12/13	MW	27,312,239	1,577,769	8,904,209	23,145,426
		Base Contract Price	**Peak Contract Price**	**Cap Contract Price**	
Q3	$/MWh	41.42	42.91	3.59	
Q4	$/MWh	43.97	53.47	6.65	
Q1	$/MWh	67.68	96.81	14.40	
Q2	$/MWh	50.03	60.00	3.20	
12/13	$/MWh	50.68	63.12	6.93	
		Base Cost	**Peak Cost**	**Cap Cost**	**Total Cost**
Q3	$'000	260,033	18,105	6,102	284,241
Q4	$'000	306,638	19,566	18,583	344,787
Q1	$'000	530,681	47,202	39,151	617,033
Q2	$'000	311,158	18,140	5,412	334,710
12/13	$'000	1,408,511	103,013	69,248	1,580,772
	$/MWh	**60.85**	**4.45**	**2.99**	**68.30**

Including the costs of caps and peak cover, this shows an average energy cost of $68.30 per MWh, substantially higher than the $61.60 reported by ACIL.

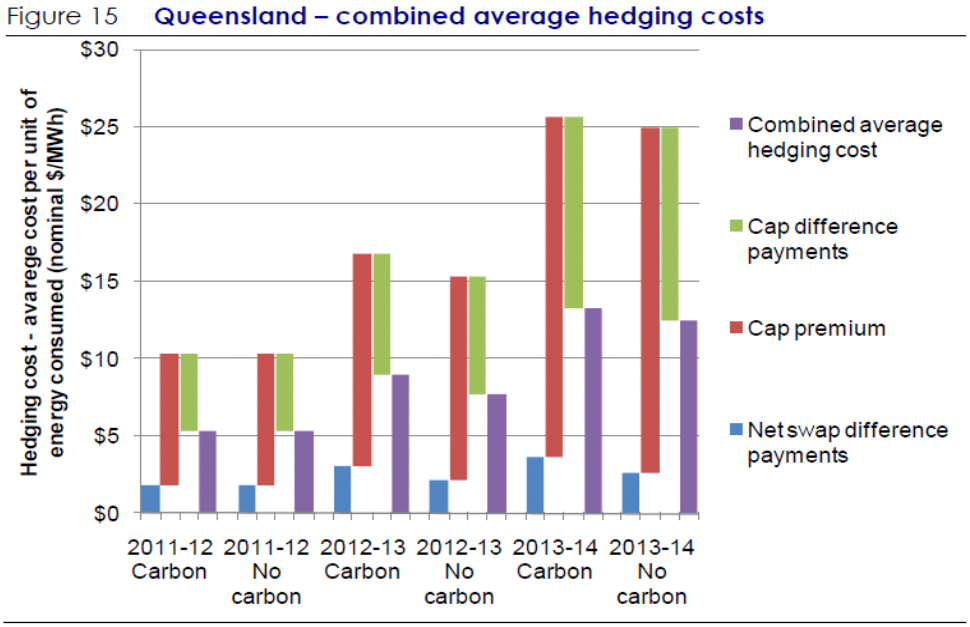
It is unclear but Origin can only determine that cap returns from the median cost pool price scenario are in the order of $7 per MWh which reduces the average energy cost.

Given ACIL uses 410 pool price simulations, this should not be possible. The cap contract price should always be higher than the returns of the median cost pool price scenario reflecting risk costs. Logic states that the cap contract prices should be at a premium to average returns otherwise cap cover would not be provided by generators.

In fact, if cap costs were removed from the analysis in Table 2, the average energy cost is still over $65 per MWH. This is higher than every one of the 410 energy cost scenarios reported by ACIL.

In its October 2011[4] report, ACIL modelled pool price outcomes under an extreme price year in order to estimate the risk premium that retailers would be willing to pay to enter into cap contracts to manage their exposure to price events above $300 per MWh. Figure 5 shows the determination of the average hedging cost including the cap premium and difference payments.

Figure 5: ACIL Modelling of Queensland hedging costs



Source: ACIL Tasman analysis

Using this methodology, ACIL modelled a cap premium of around $6 per MWh in 2012-13. This highlights the absurdity that ACIL's modelling for the QCA is providing cap returns higher than cost.

The level of cap contract prices used in the Draft Decision reflects the low levels of returns over the past April 2009-March 2012 averaging $4.69/MWh but ACIL will need to reconsider its cap pricing and modelling.

Origin recommends that at a minimum, due to the uncertainty in pool price returns and difficulty to calibrate pool and contract prices, returns should be fully discounted by calculating the load-weighted hedge cost based on contract prices and volumes as outlined

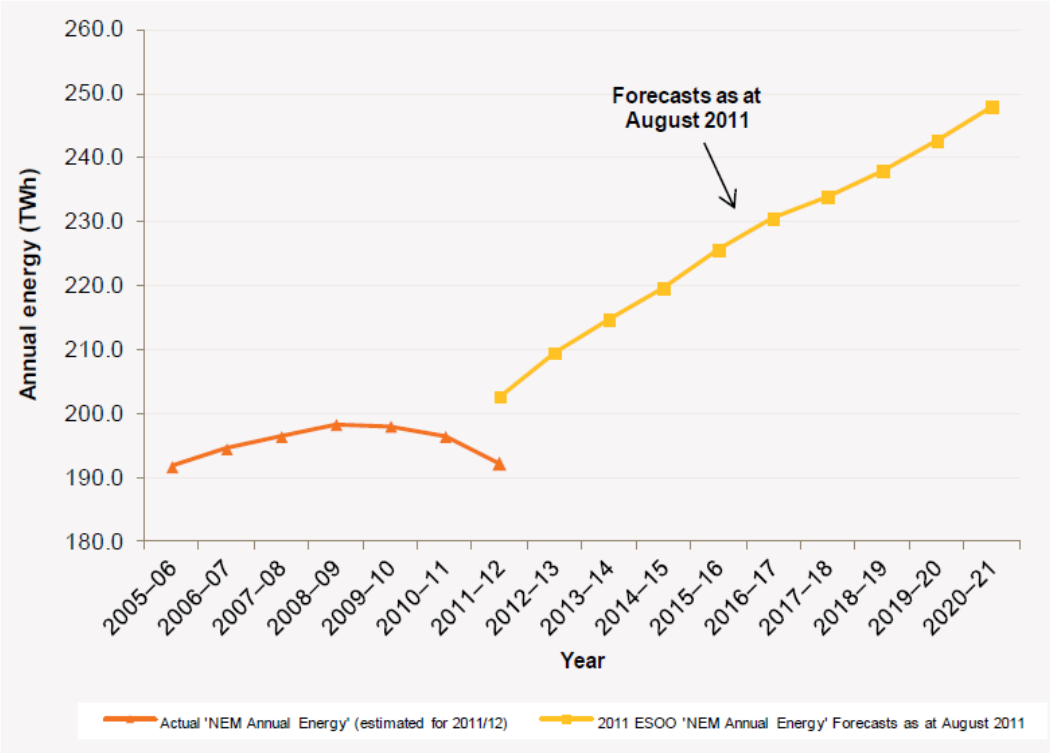
[4] ACIL Tasman, *Wholesale energy cost forecast for serving residential users, p12-13*

in the hedging strategy. This would provide transparency and simplicity through removing the need to forecast pool prices via a "black box."

2.2.4 NEM Demand

On 6 March 2012, AEMO reduced the 2011-12 NEM forecast by 10.6 TWh or 2 per cent compared to 3 per cent growth assumed in their outlook published on 4 August 2011. Origin submits that any reduction in load forecast should also apply to the starting point for the 2012-13 period as well as no growth which has not occurred over the last 4 years.

Figure 6: NEM annual energy forecasts



2.2.5 NSLP Demand

Origin notes that ACIL has expanded the load data history used to define the load/weather relationship to four years to recognise the impact of extreme events.

This would be reasonable but for potential structural changes to the NSLP over the last four years as large non-residential customers have progressively been transferring out of the NSLP as well as the impacts of weather event on the NSLP.

Origin has analysed the last 4 years of NSLP and Figure 7 compares the maximum NSLP on days with an average temperature of 28 degrees. It can be clearly seen that the 2008 NSLP is substantially lower than all other load shapes.

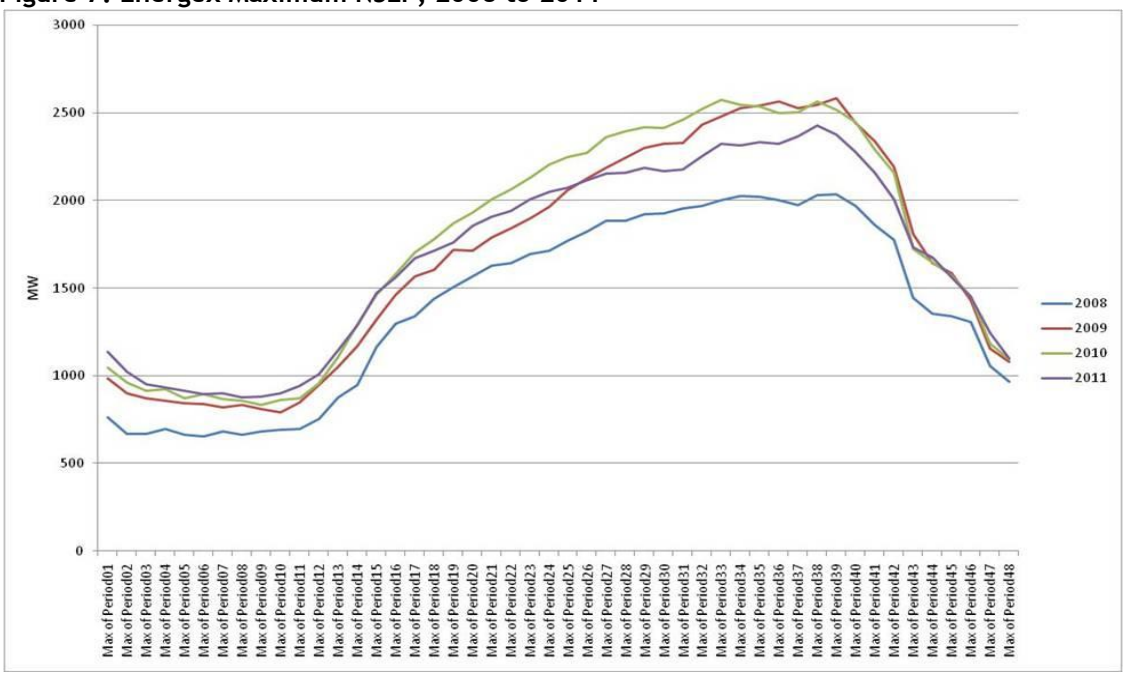
Origin therefore recommends using the last three years of load data history.

Origin would also reiterate that in order to calculate the energy purchase costs, the load profile must be based on the current Queensland NSLP minus non-residential customers consuming greater than 100MWh per annum.

The QCA has taken advice from Energex that the impact on the Large customers still remaining on regulated tariffs will be less than 1 per cent on the NSLP. Origin would challenge this assumption.

Origin estimates that approximately 10 per cent of the current Energex NSLP load is made up of Large customers on regulated tariff. This is not inconsequential. Using the NSLP without removing the remaining 100MWh customers currently in the shape is unrepresentative of the load which will be faced by retailers in 2012-13. The new Energex NSLP will be peakier than the current NSLP.

Figure 7: Energex Maximum NSLP, 2008 to 2011



2.2.6 Transmission Constraints

Finally, Origin would highlight that by omitting transmission constraints, ACIL's modelling is always likely to underestimate the real cost of energy in Queensland.

Transmission constraints are a significant driver of pool price volatility in Queensland with the recent Calvale-Wurdong transmission constraint during the first quarter of 2012 adding over $4/MWh to the quarterly pool price. This in a significant omission but is probably not a priority given the many other issues with ACIL's modelling approach and current unrealistic outcomes.

2.3 Accounting for Energy Losses

Origin accepts the approach by the QCA to adopt the most recent transmission and distribution loss factors relevant to the Energex area published by AEMO available at the time of finalising the price determination.

Origin notes that the wholesale energy cost, including carbon, has been escalated by these energy losses but would highlight that the QCA has failed to escalate some of the other energy costs accordingly.

The cost of the Gas Scheme, NEM fees and ancillary costs are accrued on energy sales but the liabilities of the renewable energy schemes are accrued on energy purchases and therefore require escalation by energy losses.

2.4 Carbon Pricing

Origin agrees with the use of the average carbon intensity of the National Electricity Market (NEM) as being the correct approach for estimating the cost of carbon.

Origin is concerned that ACIL has used a carbon intensity of 0.87 based on a forecast for the 2013 calendar year when recent AEMO data has highlighted a carbon intensity of around 0.92 over the last 12 months.

This AEMO data actually calculates the average carbon intensity at the generator gate rather than the Regional Reference Node, therefore the emissions getting the energy from the generator gate to the Regional Reference Node are not even included.

Consequently, Origin supports ACIL using the average carbon intensity being calculated at the Regional Reference Node via the application of Marginal Loss Factors to AEMO's generation and emission intensity data.

Unfortunately, this exposes a further flaw in the energy purchase cost methodology and calculations performed by ACIL. ACIL has calculated a carbon inclusive energy purchase cost so recognising that the impact of carbon is actually higher will only reduce the load weighted energy cost underlying this.

As shown above, the underlying load weighted energy cost currently estimated by ACIL is already unrealistically low. This creates a further challenge for ACIL's modelling in that it must adjust its methodology to produce both an underlying energy cost and carbon cost that are both realistic and defendable.

2.5 Green Schemes

2.5.1 Queensland Gas Scheme

Origin supports the QCA's use of a longer time series of data to estimate GEC costs for 2012-13. Although it is likely that the scheme will cease in the near future, the scheme is based on the calendar year so it is likely to continue throughout 2012 as a minimum. As such, Origin supports the calculation of GEC costs for both 2012 and 2013 until the Queensland Government announces otherwise.

2.5.2 NEM participation fees and ancillary services charges

Origin supports the methodology used to estimate the cost of market fees and ancillary services.

2.5.3 LRET

The QCA has calculated the LRET in a similar manner to the BRCI 2011-12.

Origin has always expressed concerns with an LRET estimate based on weekly market prices and that the data from the period when the REC market was depressed will under-estimate the actual costs to retailers. The LRET cost for 2012 still contains this data sequence but Origin contends that the QCA method is reasonable in that the LRET price for 2013 will only contain data from 1 January 2011 when the Expanded Renewable Energy Scheme commenced.

Origin believes this is the more robust approach than using two years of previous data for both calendar years as it will at least not include six months of distorted low REC prices for 2013.

2.5.4 SRES

Origin agrees with the formula for calculating the SRES cost allowance outlined by ACIL.

However, as indicated in previous submissions, while the SRES cost estimate is reasonable at this point in time, it is based on a non-binding estimate for 2013.

Origin still considers that, in the absence of a pass through mechanism, this approach is unfairly placing all risk surrounding this uncontrollable cost onto energy retailers. The consideration of SRES costs within the Queensland pricing framework has already resulted in Origin and other retailers not recovering the appropriate SRES costs in the retail electricity tariffs in both 2010-11 and 2011-12. These were costs amounting to tens of millions of dollars.

Therefore, the current QCA estimation method places substantial financial risk on retailers which the QCA could eliminate by varying its methodology. Origin reiterates that the QCA could apply the costs of the 2012 calendar year SRES liability as the 2012-13 SRES cost estimate.

This would clearly resolve the forecast error risk inherent in basing the SRES costs on the tariff year but does introduces a six month timing lag between the time the costs are incurred and the recovery of those costs through price. Origin would ask the QCA to investigate and respond to this approach as it has the benefit of:

- transparency by replicating the SRES liability without the need for forecasting;
- consistency with the terms of reference as it is derived from the actual cost of supply for SRES liability. The terms of reference do not confine the actual cost of supply to the tariff year and therefore the basis of denying the proposal for 2012-13 on legislative grounds is not valid;
- removing forecast error as ORER publish an annual STP for each compliance year going forward which will provide an exact measure of the liability; and
- removing the requirement to include a cost pass through mechanism to account for actual SRES differences.

3. Retail Costs and Margin

Origin agrees, in principle, to the methodology utilised by the QCA in determining retail costs. Retail costs should include an allowance for customer acquisition and retention costs, take into account the risks retailers face in operating in an electricity market as well as the need for headroom in the appropriate tariffs to continue to encourage competition in Queensland.

As previously stated, Origin supported a benchmarking approach of retail costs and margin in the absence of available data from retailers. In particular, Origin supported a benchmarking approach using the current escalated Queensland retail cost as determined in the 2011-12 BRCI determination as a starting point. The Draft Decision on retail costs therefore appears appropriate given the available benchmarks but Origin would caution the QCA to not adjust the allowance down given there are significant changes in the Queensland market that are not reflected in other jurisdictional benchmarks. The known changes include:

- the changes to tariff structures, removal of tariffs and new tariff arrangements from 1 July 2012 will be a significant expense item from a capital and ongoing cost point of view;
- the costs of administration and reporting obligations under the carbon tax from 1 July 2012; and
- the implementation of the National Energy Consumer Framework (NECF) from July 2012.

Although the QCA is understandably reluctant to make allowances for these retail costs in the 2012-13 Draft Decision as the actual costs are not yet fully known, Origin believes that there should be some recognition of these costs in any future determinations.

Origin notes the QCA Draft Decision proposes that the relevant ROC allowance be allocated to the fixed component of each retail tariff. Although Origin was amenable to up to 25 per cent of these costs being recovered by variable charges to mitigate customer impacts, it fully supports the QCA approach.

There are large fixed cost components to the selling and supplying of electricity in both the transmission and distribution network charges as well as retail operating costs. In the retail market, there are fixed costs that arise due to the nature of contracting appropriate supply and the billing and servicing retail customers. A retailer's ability to recover these fixed costs is reliant on pricing structures and the proposal by the QCA is appropriate.

Origin also considers the use of the IPART benchmark for retail margin is appropriate if the QCA can rectify the substantial under-estimate of the wholesale energy cost allowance within the Draft Decision.

Origin has previously argued that the IPART benchmark is not sufficient as the IPART regulatory framework has substantially less risks because of the use of the LRMC floor price, which smoothes energy cost, and a cost pass through mechanism that can account for uncertainties such as SRES cost variations. Admittedly, the QCA has attempted to deal with these risk exposures through the issue of headroom.

4. Network Costs

Origin notes that the QCA's Draft Decision will base regulated retail tariffs for 2012-13 on:

- Ergon Energy's network tariffs and charges for non-residential customers with consumption greater than 100 MWh per year and for street lighting; and
- Energex network tariffs and charges for all other customers, including unmetered loads other than street lighting.

Origin is supportive of this approach. It ensures tariffs are cost reflective to the relevant classes of customer and to customers of varying sizes in the relevant distribution area. This proposal will ensure that a wider group of customers across Queensland have access to the benefits of competition.

Origin believes that a fundamental element of the 2012-13 pricing framework is ensuring that the N+R pricing is evident in each of the tariffs determined. That is, there should be cost reflective rates for both the network and retail component of each tariff. The transitioning of tariffs to cost reflective levels should be dealt with through Government assistance rather than through other means. This ensures customers receive appropriate price signals to amend behaviours and thus reduce the demand on the electricity network.

Origin does have some concerns with the proposed network tariffs and their affect on retail tariffs such as the level at which the inclining block step rates derived for tariff 11. Origin believes that the setting of the rates should be on a cost reflective, revenue neutral basis for the network business, but the rates may need to be rebalanced.

For example, the third band of tariff 11 is relatively high, even in comparison to tariff 20 meaning that any residential customer consuming more than 9.5 MWh per annum would be better off on tariff 20 than remain on tariff 11. Given Energex's pricing principles, this cost allocation seems unreasonable and will be unsustainable with regard to managing customers' selection of the appropriate retail tariff.

A similar issue arises with tariff 12. The off peak rate is similar to the first band of tariff 11 such that any customer consuming less than 5 MWh per annum is better off on tariff 11 than tariff 12 irrespective of demand patterns. The rates of tariff 12 do not provide any incentive for a low energy user to switch to a time of use tariff.

Origin would also note that the differential pricing for peak and off peak rates on tariff 22 are minimal with these rates in close proximity to tariff 20 rates. The incentive for businesses to manage demand appears to be eroded in the new network tariffs.

Origin understands that the QCA do not have the powers to amend network tariffs but would urge Energex to review its network tariffs in light of the Draft Decision to ensure equity is achieved through its new pricing structures.

Origin's specific comments in response to the network issues raised in the Draft Decision are set out in the table below.

Table 3: Origin's Response to network issues

Issue	QCA Proposal	Origin Response
Energex's network tariff structure	That the relevant tariffs should be based on Energex's proposed 2012-13 network tariff structures.	Agree.
Residential Inclining block and time of use tariffs	That the tariffs should be based on Energex's proposed 2012-13 network tariff structures.	See comments above. Origin has some concerns that Energex's rates for T11 and T12 may be too severe at certain steps but will discuss with Energex.
Tariffs for farmers, irrigators, customers supplied under the rural subsidy scheme or Drought Declared	Remove T67 and T68. Customers should be moved to T20.	Agree.
Streetlighting and other unmetered supplies	Streetlighting tariffs to be based on Ergon Energy's network tariffs. All other unmetered supply to be based on Energex's network tariffs	Agree.
Obsolete and declining block retail tariffs	Transitional measures should be put into place to remove T37 and T66 over a 12 month period	Origin believes all tariffs should be cost reflective and transitional arrangements should be dealt with through the Government. Further comments on these transitional arrangements are included in section 5.1.
Tariffs for Large (Ergon Energy) customers	Regulated retail tariffs for large customers in Ergon Energy's area should be based on Ergon's network tariffs.	Agree. This would create a level playing field and allow retailers to compete for large customers outside of south-east Queensland.
Maintaining alignment of retail and network tariffs	Request Energex and Ergon Energy to supply the QCA with its proposed network prices when submitted to the AER and use these as the basis for notified prices to apply from 1 July. Should there be any material change to these proposed tariffs, regulated retail prices could be adjusted after 1 July to this. The QCA notes that prices under the NECF can only be changed once every 6 months and the QCA's delegation to set prices ends on 31 May 2012.	While Origin supports the QCA's position in principle: (1) How does the QCA define material? Retailers should not wear the costs due to timing irregularities of different Regulators (2) Origin would support the Queensland Government amending the NECF pricing policy whereby retailers can only amend prices 6 monthly. There should be an exception included to this clause to allow for prices changes in circumstances where network tariffs differ from the retail pricing decision.

5. Competition, Transitional and Other Issues

5.1 Transitional Arrangements

Origin is firmly of the view that social welfare concerns regarding the move to cost reflective tariffs should be dealt with by the Government through financial assistance rather than through distorting electricity prices. It is Origin's belief that customers need to see the full, cost reflective charge for their electricity consumption and this is even more important with the introduction of the carbon tax. If such a scheme is to have the desired impact on customer behaviour, actual prices need to be transparent.

Origin has particular concerns with the QCA's proposed transitioning of tariff 37 to a cost reflective rate over a 12 month period. There are a number of flaws with this approach:

- The proposed escalation of these tariffs is based on the BRCI methodology and not the new N + R framework. Network and retail costs are not transparent;
- All other tariffs are moving to cost reflective rates which removes the cross subsidisation of the various tariffs. This removes the ability for Origin to recover any cost shortfall from other retail tariffs; and
- It is implied that retailers should wear the financial costs of non-cost reflective tariffs over the transitional period. This is highlighted by the QCA's statement *"to hold a tariff below cost reflective prices would imply that either retailers continue to suffer financial loss…"*[5]

The above goes against the reform objectives of the QCA in that they have to have regard to *"the actual costs of making, producing or supplying the goods or services"*[6]. If the Queensland Government will not provide the financial assistance to impacted customers to achieve cost reflective tariffs, Origin is of the view that the costs of this transitioning framework should also be met by the network business. The relevant network tariffs should be appropriately adjusted downwards to reflect the transitioning rates. A retailer should not be the liable party to wear these costs.

As a standard retailer, the costs of transitioning are substantial and retailers should not be required to wear the risks of previous policy decisions to not adjust tariffs to cost reflective rates over previous determinations. The estimated financial burden to Origin for the transitioning of tariff 37 is almost $700 per customer per annum.

5.2 Tariff Gazette Issues

It is noted that the Draft Determination includes a proposed Draft Tariff Schedule for 2012-13. Origin appreciates reviewing this advance draft of the schedule so that the business is able to ensure systems and processes are in place to comply with the requirements from 1 July 2012.

While reviewing the Draft Tariff Schedule, Origin notes that there have been numerous changes to tariff words and the terms and conditions of each of the tariffs. Specific comments are outlined below in Table 4.

[5] QCA, Regulated Retail Electricity Prices 2012-13, Draft Determination, March 2012,p80
[6] lbid, p3

Table 4: Origin's comments on the Draft Tariff Schedule 2012-13

Draft Report Reference	Tariff Schedule 2012-13	Origin Response
Front page of gazette (p106 Draft Report)	Sub clause (b) states that *"the retail entity has obtained the customer's consent (as defined in the Electricity Industry Code)"*	The reference to the Electricity Industry Code will need to be replaced with the introduction of the National Energy Consumer Framework.
Part 1, Tariff 11 (p107 Draft Report)	Fourth paragraph under T12 states "*Where a NMI has multiple meters, the consumption for all Tariff 11 meters will be aggregated for billing purposes.*"	Origin will need to confirm with Government how this statement equates with certain legacy on-supply arrangements?
Tariff 20 (p108 Draft Report)	It is noted that the Tariff Schedule no longer states that T20 cannot be used in conjunction with T22 at the same NMI.	Origin believes that the wording from the 2011-12 Tariff Schedule which states that T20 cannot be used in conjunction with T22 at the same installation should remain. Different metering arrangements would be needed for these tariffs and it may not be appropriate to allow both tariffs at the same installation/NMI.
Tariff 31 and 33 (p108-109 Draft Report)	First paragraph under T31 and T33 states *"Customers can access this tariff providing it is in conjunction with a residential or business tariff at the same NMI"*	While Origin agrees with this principle moving forward, it should be noted that Origin has a number of historical accounts where T31 or T33 are on a standalone basis. These tariffs are not in combination with any other business or residential tariff. This statement may need clarification that from 1 July 2012, this tariff can only be accessed if it is in combination with another tariff.
Tariff 31 and 33(p109 Draft Report)	Third last paragraph for T31 and T33 states *"Connections to this tariff may also be agreed to by the distribution entity".*	Origin does not agree with the inclusion of this statement. It is up to the retail entity to arrange connections on behalf of the customer with the distribution entity. Origin questions how the retail entity will be notified that they have connected a customer to this retail tariff.
Tariff 37 (p110 Draft Report)	A minimum charge per month has been retained.	Origin believes that all minimum charges should be converted to fixed charges.
Tariff 41 (p110 Draft Report)	Demand charges are expressed on a monthly rate basis (ie. c/kW/month).	Agreed

Draft Report Reference	Tariff Schedule 2012-13	Origin Response
Tariff 66 (p112 Draft Report)	The wording for the service fee states that it is a monthly rate.	Although the wording states it is a monthly rate, it appears that the monetary figure for the tariff is a daily rate. Origin believes that all service fees should be on a daily basis.
Tariff 91 (p112 Draft Report)	Tariff 91 is titled *"Other unmetered supply"*.	T91 was previously a Watchman Service but is now all unmetered supply?
Part 3 (p113 Draft Report)	Third paragraph on the page states that *"Large business customers with access to notified prices who are currently on T20 and 22 will be transferred…"*	Origin assumes that this statement is also meant to include T41. The Tariff Schedule wording for T41 (p110) states that large business customers cannot access T41.
Part 3, Tariff 11 (p113 Draft Report)	Sets out examples of how quarterly bill should be calculated	Agreed
Part 3, HV Discount (p114 Draft Report)	The Schedule includes conditions around credits where LV tariffs is metered at HV	Origin believes that this condition should be limited to large customers in the Ergon area. This condition is not relevant to the Energex's distribution area. Also, the percentage discounts need to be reviewed.

5.3 Customer Impacts

The customer impacts of the Draft Decision are dependent on the tariff the customer is being supplied on. The Draft Decision clearly shows that there are a large number of customers that have been paying for electricity at below cost reflective rates and enjoying the benefits of cross subsidies from other tariffs or through the funding of retail businesses. The opposite is true for customers that will see a fall in their average bill. Origin believes that customers need to receive the appropriate price signals in order to manage their electricity use and to fulfil the market objectives of reducing the demand on the network businesses and greenhouse emissions.

What is not clear in the customer impact section of the Draft Decision is that a large change in average customer's total bill is related to network charges. Retail costs now make up less than 9 per cent of the bill, network charges almost 48 per cent while energy costs including the carbon tax comprise the remaining 43 per cent of the bill.

Origin is cognisant that the move to cost reflective tariffs and the removal of obsolete tariffs may financially impact certain classes of customers from 1 July 2012. Origin is committed to working with identified customers to find either alternative appropriate tariffs, assisting them through Origin's hardship program or setting up appropriate payment plans.